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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,474	03/17/2004	George H. Harth III	Case 7073	5322

41669 7590 10/28/2005

THE BABCOCK & WILCOX COMPANY
PATENT DEPARTMENT
20 SOUTH VAN BUREN AVENUE
BARBERTON, OH 44203

EXAMINER

WILSON, GREGORY A

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,474

Applicant(s)

HARTH, GEORGE H.

Examiner

Gregory A. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4-12 are rejected under 35 U.S.C. 102(b) as being anticipated by **Harth et al (6,006,702)**. **Harth et al** discloses a rigid structure of two halves (14, 16) of arcuate grooves such that when the two halves are mated, parallel and spaced apertures are formed to hold a series of tubes (18) in an aligned and fixed spaced relationship, the tubes are fitted with shields adjacent the two halves where the two halves are sized to overlap adjacent portion of the shield (30) (SEE Figure's 5 & 6) covering potential gaps and welded and includes a retainer shield (23) which encase the two halves thereby covering any gaps and are also welded at location (26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Harth et al (6,006,702)** in view of **Jacksits (5,404,941)**. **Harth et al** discloses the applicants'

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primary inventive concept as stated above but does not particularly teach a connecting means between some to the spaced apertures of the two halves of the rigid structure.

Jacksits, however, teaches that it is known in the art to use connection means (17) (SEE Figures 1-3) for clamping rigid structure spacer ring in relation to the tubes. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have incorporated the connecting means of **Jacksits** into the rigid structure of **Harth et al** for the purpose of clamping together both halves of the split ring casting for supporting tubes in a boiler.

Response to Arguments

Applicant's arguments filed 8/15/05 have been fully considered but they are not persuasive. While Harth et al may be concerned with a problem different from applicants invention, it is hereby submitted that the structure of Harth et al still anticipates applicants invention as now seen in Figures 5 and 6 either directly or inherently. With regard to applicant's arguments that Harth et al does not in any way address the problem faced by the applicant, since the boiler tubes in the Harth et al patent are not equipped with tube shields, the examiner respectfully disagrees and directs applicants attention to Figures 5 & 6, most notably element (30) which anticipates the applicants protective shields (32). The element (30) which inherently provides some protection to the tube, is embodied within the retainer (23). It is this element (30) that, as opposed to applicants protective shield (32), surrounds and protects tube (18) while inherently allowing two halves of split ring (16) to overlap

longitudinal portions of the protective element (30) covering any gaps which may be present or result from the difference in thermal expansion between the tubes and protective element (30).

In view of examiners response as it pertains to Harth et al, I additionally disagree with the applicant's assessment of Jacksits as it is used in combination with Harth et al, wherein Jacksits teaches in Figures 4 & 5, the clamping of the two halves of the rigid structure around each tube (10) in a manner in which when combined with the Harth et al reference, would be adjacent the tube shields. It is for this reason that the examiner deems Harth et al in view of Jacksits relevant prior art of the applicants invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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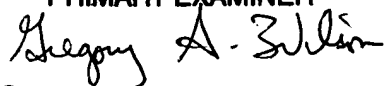
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GREGORY WILSON
PRIMARY EXAMINER



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October 24, 2005